

IN THE CLAIMS:

Please amend claims 1-4, 6-10, 12-15, 17-18 and 20-21 as provided below:

1. (Currently amended) A method for coupling a surface-oriented optoelectronic component to an end face of an optical fiber, ~~in which~~comprising:
[[-]] arranging the fiber ~~is held~~ at a holding point ~~arranged at~~ a predetermined distance from the end face in such a way that the end face can perform a pivoting movement about the holding point[[,]]; and
[[-]] bringing the end face of the fiber and the component ~~are brought~~ close to one another in the context of a coarse adjustment in such a way that a fine adjustment is subsequently effected between the component and the fiber in the context of an automatic self-centering by pivoting the fiber about the holding point.
2. (Currently amended) The method as claimed in claim 1, ~~wherein~~further comprising:
[[-]] providing the ~~component has~~ a projecting structure arranged rotationally symmetrically with respect to ~~the an~~ optically active zone of the component[[,]];
[[-]] wetting the end face of the fiber ~~and/or~~ the projecting structure of the component ~~are/is wetted~~ with a transparent adhesive[[,]]; and
[[-]] bringing close together the component and the fiber ~~are brought close~~ in such a way that the adhesive propagates between the end face of the fiber and the projecting structure, thereby bringing about ~~the a~~ self-centering of the fiber relative to the component.
3. (Currently amended) The method as claimed in claim 2, ~~wherein~~further comprising, after the self-centering, a-curing of the adhesive ~~is brought about~~ for the purpose of fixing the centered arrangement between the fiber and the projecting section.

4. (Currently amended) The method as claimed in claim 1, ~~wherein further~~ comprising fixing the component is fixed in a housing and only afterward is prior to subjecting the end face of the fiber ~~subjected~~ to coarse adjustment relative to the component fixed in the housing.
5. (Original) The method as claimed in claim 4, wherein the component is contact-connected after being fixed in the housing and the coarse adjustment of the end face of the fiber is effected relative to the component which has been fixed in the housing and contact-connected.
6. (Currently amended) The method as claimed in claim 1, ~~wherein further~~ comprising fitting a strain relief device is fitted to a housing that receives the component and to the fiber to couple to the component.
7. (Currently amended) The method as claimed in claim 6, wherein ~~a ferrule is fixed, as the strain relief device~~ comprises a ferrule fixed[[,]] to the housing and to the fiber.
8. (Currently amended) The method as claimed in claim 7, ~~wherein further~~ comprising pushing the ferrule is pushed onto the fiber before the coarse adjustment.
9. (Currently amended) The method as claimed in claim 8, wherein the ferrule is pushed into a region of the ferrule which lies outside ~~the~~ a pivoting range of the fiber delimited by the end face of the fiber and the holding point.
10. (Currently amended) The method as claimed in claim 7, wherein the ferrule is pushed onto the fiber at ~~that an~~ an end of the fiber which is remote from the self-adjusting end ~~side~~ face after the fiber has been self-centered relative to the component and the fiber has been fixed to the component.

11. (Original) The method as claimed in claim 7, wherein the ferrule is adhesively bonded both to the fiber and to the housing.

12. (Currently amended) The method as claimed in claim 1, wherein, after the fiber has been fixed to the component, fitting a coupling device ~~is fitted~~ to or ~~formed~~ forming the coupling device at that end of the fiber which is remote from the end face.

13. (Currently amended) The method as claimed in claim 12, wherein the coupling device ~~is formed by~~ comprises a receptacle or a fiber pigtail.

14. (Currently amended) The method as claimed in claim 4, ~~wherein~~ further comprising:

[[-]] forming a passage hole ~~is produced~~ in a carrier of the housing[[.]];

[[-]] fixing the component ~~is fixed~~ on a side of the carrier in such a way that the optically active zone of the component faces the passage hole[[.]]; and

[[-]] directing the fiber ~~is led~~ through the passage hole ~~and for~~ the coarse adjustment ~~is carried out~~ thereof.

15. (Currently amended) The method as claimed in claim 14, ~~wherein~~ further comprising:

[[-]] electrically connecting ~~the~~ electrical connections of the component are ~~electrically connected~~ to conductor tracks present on the carrier, wherein

[[-]] the electrical connections lying beside in ~~the~~ a region ~~of~~ associated with the passage hole and the conductor tracks projecting into the region of the passage hole.

16. (Original) The method as claimed in claim 2, wherein the diameter of the projecting structure is chosen to have exactly the same magnitude as the diameter of the fiber.

17. (Currently amended) The method as claimed in claim 2, wherein ~~the~~ a position of the projecting structure and ~~the~~ a position of the optically active zone of the component are defined in the context of one and the same lithography step.

18. (Currently amended) The method as claimed in claim 1, wherein the surface-oriented optoelectronic component comprises a VCSEL laser diode, an LED or a photodiode, and is coupled, ~~as the surface-oriented optoelectronic component,~~ to the fiber.

19. (Original) The method as claimed in claim 1, wherein, in the manner described, one component is connected to one end of the fiber and a further component is connected to the other end of the fiber.

20. (Currently amended) An apparatus for coupling a surface-oriented optoelectronic component to an optical fiber, comprising:
[[-]] ~~having~~ a baseplate for holding the component[[-]]; and
[[-]] ~~having~~ a holding element arranged configured to hold the component at a predetermined distance from the baseplate,
[[-]] the holding element serving to hold the fiber and enabling a pivotable movement of the fiber in a pivoting range of the fiber delimited by the end face of the fiber and the holding point above the baseplate.

21. (Currently amended) An optoelectronic module having a surface-oriented optoelectronic component, having an optical fiber and having a housing, wherein
[[-]] the housing ~~having~~ comprises a carrier with a passage hole,
[[-]] the component being fixed on a side of the carrier in such a way that ~~the~~ an active zone of the component faces the passage hole, and wherein
[[-]] the fiber ~~being led~~ extends through the passage hole and couples to the component ~~and the fiber being coupled,~~ and wherein

[[-]] electrical connections of associated with the component ~~being~~ are electrically connected to conductor tracks present on the carrier, and wherein

[[-]] the electrical connections of the component ~~lying~~ reside in the region of the passage hole and the conductor tracks ~~projecting~~ project into the region of the passage hole to form a suspension for the component.